

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

Remarks

Claims 1-22 are pending in the application, and claims 1-17 and 19-22 have been rejected by the Examiner. Claim 18 has been objected to by the Examiner.

The Examiner has rejected claims 1, 7, and 19 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 3,975,931 to Bischkopf. Generally, Bischkopf discloses a flush-in device for a washing machine or a dishwashing machine having three chambers in which three different products are contained. Water enters at one end of the device, the water flushes into a chamber to create a use solution with the respective product, and the use solution exits the opposite end of the device from where the water entered the device. As the water flows through the chamber along the bottom of the chamber, the water flushes the product out of the chamber. The products are dispensed in an order beginning from the use solution output end and ending from the water input end. As each product is dispensed, the product is emptied from the chamber as to not interfere with the subsequently dispensed product(s). This is disclosed in column 3, line 34 through column 4, line 3 of Bischkopf.

Among the differences from the present invention, this reference does not teach using a solid detergent for use in multiple cycles (more than one flooding of water within the cavity). This reference requires that product be added to each chamber between each cycle of the washing machine or dishwashing machine. Claims 1, 7, and 19 have been amended to recite that the solid detergent is dispensed completely over more than one flooding of water within the cavity of the dispenser. Only a relatively small portion of solid detergent is dispensed during each cycle.

Each element in each claim must be disclosed by Bischkopf to anticipate the claim, and Bischkopf does not include each element of each claim. For example, Bischkopf does not disclose a solid detergent dispensed completely over more than one flooding of water within the cavity. Rather, Bischkopf discloses that product is added to each chamber between each cycle. Therefore, claims 1, 7, and 19 are not anticipated by Bischkopf.

The Examiner has rejected claims 2-6 and 8-12 under 35 U.S.C. 103(a) as being unpatentable over Bischkopf. Bischkopf neither teaches nor suggests using a solid detergent for

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

use in multiple cycles (more than one flooding of water within the cavity), which is recited in claims 1 and 7, the independent claims upon which these claims depend. Therefore, because claims 1 and 7 are not obvious in view of Bischkopf, claims 2-6 and 8-12 are also not obvious in view of Bischkopf.

With respect to claims 2 and 8, these claims depend upon claims that are not obvious in view of Bischkopf. Therefore, these claims are also not obvious. Further, Bischkopf dispenses/empties the product completely from each chamber (column 3, lines 1-15). As the water flows through the chamber along the bottom of the chamber, the water flushes the product out of the chamber and the product is emptied from the chamber as to not interfere with the subsequently dispensed product(s). This is disclosed in column 3, line 34 through column 4, line 3 of Bischkopf. There is no teaching or suggestion as to water level within each chamber. Since the product is being flushed from the chamber as the water flows through the chamber, the water level within the chamber is irrelevant. Therefore, it is respectfully submitted that it is not credible to believe that the values of the water level within each chamber would fall within the range recited in these claims. Bischkopf is a flush-in device that empties each product completely from each chamber as water flows through, and therefore, Bischkopf neither teaches nor suggests any ranges for water levels within the chambers.

With respect to claims 3 and 9, these claims depend upon claims that are not obvious in view of Bischkopf. Therefore, these claims are also not obvious.

With respect to claims 4 and 10, these claims depend upon claims that are not obvious in view of Bischkopf. Therefore, these claims are also not obvious. Further, Bischkopf dispenses/empties the product completely from each chamber (column 3, lines 1-15). As the water flows through the chamber along the bottom of the chamber, the water flushes the product out of the chamber and the product is emptied from the chamber as to not interfere with the subsequently dispensed product(s). This is disclosed in column 3, line 34 through column 4, line 3 of Bischkopf. There is no teaching or suggestion as to the rate of water entering and/or exiting the device. Since the product is being flushed from the chamber as the water flows through the chamber, the rate of water flowing into and out of the device is irrelevant. Therefore, it is

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

respectfully submitted that it is not credible to believe that the rate of water in is greater than the rate of water out of the device to dissolve a portion of the product because the product is dispensed completely from each chamber in Bischkopf. Bischkopf is a flush-in device that empties each product from each chamber, and therefore, Bischkopf neither teaches nor suggests any rates of water entering or exiting the device.

With respect to claims 5 and 11, these claims depend upon claims that are not obvious in view of Bischkopf. Therefore, these claims are also not obvious. Further, the concentration of the product in Bischkopf is determined by how much product the user places in the chamber, not by how the product is dispensed by the dispenser. The present invention includes a product that is dispensed over several cycles, and the concentration of the product is generally determined by factors other than how much product is placed in the cavity by the user. Therefore, claims 5 and 11 are not obvious in view of Bischkopf.

With respect to claims 6 and 12, these claims depend upon claims that are not obvious in view of Bischkopf. Therefore, these claims are also not obvious. Further, it is respectfully submitted that uniform dissolution of the product does not occur in Bischkopf and a relatively constant concentration and a relatively constant shape of the product does not result because there is no product remaining in the chamber at the end of each cycle. Bischkopf discloses that the products are flushed out completely during each cycle and must be replenished between cycles. Therefore, claims 6 and 12 are not obvious in view of Bischkopf.

The Examiner has rejected claims 13-17 under 35 U.S.C. 103(a) as being unpatentable over Bischkopf in view of U.S. Patent 4,555,347 to O'Dowd et al. Claim 13 has been amended to recite that the solid detergent is dispensed completely over more than one flooding of water within the cavity of the dispenser. In other words, only a relatively small portion of solid detergent is dispensed in each cycle. It is respectfully submitted that uniform dissolution of the product does not occur in Bischkopf and a relatively constant concentration and a relatively constant shape of the product does not result because there is no product remaining in the chamber at the end of each cycle. Bischkopf discloses that the products are flushed out completely during each cycle and must be replenished between cycles. Therefore, because

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

Bischkopf discloses that product is added to each chamber between each cycle, claim 13 is not obvious in view of Bischkopf.

Further, O'Dowd et al. generally discloses an iodine disinfection dispenser. O'Dowd et al. has been cited for teaching a tunnel as recited in claim 13, but Applicants respectfully submit that O'Dowd et al. is non-analogous art. This reference is not within the field of Applicants' invention, and it is not reasonably pertinent to the particular problem with which the inventors were concerned because it has not been shown that a person of ordinary skill, seeking to solve a problem of dispensing a detergent, would reasonably be expected or motivated to look to an iodine disinfection dispenser. Therefore, claims 13-17 are not obvious in view of Bischkopf and O'Dowd et al.

With respect to claim 14, this claim depends upon a claim that is not obvious in view of Bischkopf. Therefore, this claim is also not obvious. Further, Bischkopf dispenses/empties the product completely from each chamber (column 3, lines 1-15). As the water flows through the chamber along the bottom of the chamber, the water flushes the product out of the chamber and the product is emptied from the chamber as to not interfere with the subsequently dispensed product(s). This is disclosed in column 3, line 34 through column 4, line 3 of Bischkopf. There is no teaching or suggestion as to water level within each chamber. Since the product is being flushed from the chamber as the water flows through the chamber, the water level within the chamber is irrelevant. Therefore, it is respectfully submitted that it is not credible to believe that the values of the water level within each chamber would fall within the range recited in this claim. Bischkopf is a flush-in device that empties each product from each chamber, and therefore, Bischkopf neither teaches nor suggests any ranges for water levels within the chambers.

With respect to claim 15, this claim depends upon a claim that is not obvious in view of Bischkopf. Therefore, this claim is also not obvious.

With respect to claim 16, this claim depends upon a claim that is not obvious in view of Bischkopf. Therefore, this claim is also not obvious. Further, Bischkopf dispenses/empties the product completely from each chamber (column 3, lines 1-15). As the water flows through the

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

chamber along the bottom of the chamber, the water flushes the product out of the chamber and the product is emptied from the chamber as to not interfere with the subsequently dispensed product(s). This is disclosed in column 3, line 34 through column 4, line 3 of Bischkopf. There is no teaching or suggestion as to the rate of water entering and/or exiting the device. Since the product is being flushed from the chamber as the water flows through the chamber, the rate of water flowing into and out of the device is irrelevant. Therefore, it is respectfully submitted that it is not credible to believe that the rate of water in is greater than the rate of water out of the device to dissolve a portion of the product because the product is dispensed completely from each chamber in Bischkopf. Bischkopf is a flush-in device that empties each product from each chamber, and therefore, Bischkopf neither teaches nor suggests any rates of water entering or exiting the device.

With respect to claim 17, this claim depends upon a claim that is not obvious in view of Bischkopf. Therefore, this claim is also not obvious. Further, the concentration of the product in Bischkopf is determined by how much product the user places in each chamber, not by how the product is dispensed from the dispenser or by how the dispenser functions with the product. The present invention includes a product that is dispensed over several cycles, and, the concentration of the product is generally determined by factors other than how much product is placed in the cavity by the user.

The Examiner has rejected claim 20 under 35 U.S.C. 103(a) as being unpatentable over Bischkopf in view of U.S. Patent 5,782,109 to Spriggs et al. Claim 20 has been amended to recite that the solid detergent is dispensed completely over more than one flooding of water within the cavity of the dispenser. In other words, only a relatively small portion of solid detergent is dispensed in each cycle. Therefore, because Bischkopf discloses that product is added to each chamber between each cycle, claim 20 is not obvious in view of Bischkopf. Further, claim 20 is not obvious in view of Bischkopf and Spriggs et al.

The Examiner has rejected claims 21-22 under 35 U.S.C. 103(a) as being unpatentable over Bischkopf in view of U.S. Patent 3,604,225 to Douglas. Claim 21 has been amended to recite a solid detergent that is dispensed completely over more than one flooding of water within

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

the cavity, and claim 22 has been amended to recite that the solid detergent is dispensed completely over more than one flooding of water within the cavity. In other words, only a relatively small portion of solid detergent is dispensed in each cycle. Therefore, because Bischkopf discloses that product is added to each chamber between each cycle, claims 21 and 22 are not obvious in view of Bischkopf. Therefore, claims 21 and 22 are not obvious in view of Bischkopf and Douglas.

The Examiner has objected to claim 18 as being dependent upon a rejected base claim, but would allow this claim if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Because claim 13 has been amended, Applicants respectfully request allowance of dependent claim 18.

Claims 23-27 have been added. These newly added claims recite limitations previously considered by the Examiner and do not add new matter. Therefore, favorable consideration of these newly added claims is respectfully requested.

Favorable consideration of these amendments and remarks is respectfully requested. If the Examiner would like to discuss this matter, the Examiner is welcome to contact the undersigned representative for the Applicants.

Respectfully submitted,

TERRENCE P. EVERSON ET AL.

By: 

Robin A. Sannes
Reg. No.: 45,070
IPLM Group, P.A.
Post Office Box 18455
Minneapolis, MN 55418
Telephone: (612) 331-7419